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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/545,592	04/07/2000	Richard Henry Mandel III	ST9-99-179	9939

23373 7590 10/21/2004
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EXAMINER

PHAM, HUNG Q

ART UNIT PAPER NUMBER

2162

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

09/545,592

Applicant(s)

MANDEL, RICHARD HENRY

Examiner

HUNG Q PHAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-16, 19-27, 30-34, 36 and 38 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 17, 18, 28, 29, 35, 37 and 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/08/2004 has been entered.

Response to Arguments

2. Applicant's arguments filed 07/08/2004 have been fully considered but they are not persuasive.

As argued by applicant on page 13, line 13-page 1, line 4:

Regarding the Examiner's allegation (3) that the select statement is executed with the WHERE clause modified to be FALSE, Applicant respectfully submits that this allegation is incorrect and unsupported.

Specifically, there is simply no mention of the use of any "false clause," or the replacement of a selected clause by a "false clause," in the Related Art (or, for that matter, Fundamentals of Database Systems). Thus, not all of the claim limitations are taught or suggested, and prima facie obviousness cannot be established. In re Royka, 490 F.2d 981 (CCPA 1974).

Examiner respectfully traverses because of the following reasons:

Pages 1-2 are described as Related Art. However, as illustrated on page 2, lines 9-13,

On the other hand, some systems do not provide such techniques for obtaining the types of a result set. The DB2 Version 5 of the OS/390 platform, on the other hand, does not have a DESCRIBE command. However, a developer can alter the Data

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Manipulation Language (DML) statement so that it returns no data, but allows full access to the metadata similar to that provided in the above DESCRIBE command.

DB2 for OS/390 Version 5 became generally available in June 1997

(<http://www.redbooks.ibm.com/abstracts/sg245421.html>), and predated the filing date of invention at least two years. Thus, the illustrated technique is prior art technique.

Data Manipulation Language is a language to manipulate a database. Typical manipulations include retrieval, insertion, deletion and modification of the data (Microsoft Press Computer Dictionary Third Edition, page 132).

SQL is a Data Manipulation Language. As disclosed by Elmasri on pages 192-193, SELECT statement is a DML statement for retrieving information from the database in the form of:

```
SELECT <attribute list>
FROM   <table list>
WHERE  <condition>
```

<condition> is a Boolean (TRUE, FALSE) expression that identifies the tuples to be retrieved by the query. As shown in FIG. 7.2 (a) of page 194 is the result of query Q0. The result of the query includes column names as *metadata* and data because the condition of WHERE statement is TRUE. As shown in FIG. 7.3 (c) is the result of the query Q12 with column names as *metadata* but without any data return, because the condition of WHERE statement is FALSE. Thus, FIG. 7.3 (c), Thus, the use of false clause is mentioned in Fundamentals of Database System of Elmasri, prima facie obviousness can be established, and the DML statement, obviously, could be altered by

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replacing a WHERE statement with a false statement so that it returns no data, but allows full access to column names as *metadata*.

Claim Objections

3. Claims 34-39 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 1, 6, 12, 17, 23 and 28. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. **Claims 1, 12, 23 and 34-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.**

As in claims 1, 12 and 23, the step of *executing the modified query with the false clause* was not described in the specification (as disclosed in specification, pages 11 and 12-13, two false clauses were generated for a SQL statements has two WHERE clauses).

As in claims 34-39, the step of *modifying the query to replace one or more selected clauses with a false clause, and generating a list of modified queries, wherein each modified query has one or more selected clauses replaced with a false clause* were not described in the specification (as disclosed in specification, pages 11 and 12-13, two false clauses were generated for a SQL statements has two WHERE clauses).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-5, 8-16, 19-27, 30-33, 34, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art [Description of Related Art, pages 1-2] in view of Elmasri et al. [Fundamentals o Database Systems].**

Regarding to claims 1, 12, 23, 34, 36 and 38, Applicant Admitted Prior Art teaches some databases have DESCRIBE command to list column names and data types of a query result. If the system does not have the DESCRIBE command, a *developer can alter the DML statement to return no data but allow full access to the metadata to obtain the type of a result set* (Description of Related Art, pages 1-2). Data Manipulation Language is a language to manipulate a database. Typical manipulations include retrieval, insertion, deletion and modification of the data (Microsoft Press Computer Dictionary Third Edition, page 132). Thus, a DML statement for retrieving data is a query, and in other words, the technique as discussed performs the claimed *modifying the query, executing the modified query, and retrieve metadata from the result set obtained by executing the modified query*. SQL is a Data Manipulation Language. As disclosed by Elmasri on pages 192-193, SELECT statement is a DML statement for retrieving information from the database in the form of:

```
SELECT <attribute list>  
  
FROM   <table list>  
  
WHERE  <condition>
```

<condition> is a Boolean (TRUE, FALSE) expression that identifies the tuples to be retrieved by the query. As shown in FIG. 7.2 (a) of page 194 is the result of query Q0. The result of the query includes column names as *metadata* and data because the condition of WHERE statement is TRUE. As shown in FIG. 7.3 (c) is the result of the query Q12 with column names as *metadata* but without any data return, because the condition of WHERE statement is FALSE. Thus, the DML statement as disclosed in the

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admission, obviously, could be altered by replacing a WHERE statement with a false statement so that it returns no data, but allows full access to column names as *metadata*, and obviously, the modified query with the FALSE statement is executed for retrieving the column names as in FIG. 7.3 (c). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Applicant Admitted Prior Art by using a false clause to replace one or more selected clauses in order to retrieve metadata but no data return from the query.

Regarding to claims 2, 13 and 24, Applicant Admitted Prior Art and Elmasri teaches all the claimed subject matters as discussed in claims 1, 12 and 23, Elmasri further discloses *the query comprises a SELECT statement* (Elmasri, pages 192-193).

Regarding to claims 3, 14 and 25, Applicant Admitted Prior Art and Elmasri teaches all the claimed subject matters as discussed in claims 2, 13 and 24, but does not explicitly teach *the SELECT statement is not a SELECT INTO statement*. However, a SELECT is for SQL query, and a SELECT INTO is for SQLJ. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Applicant Admitted Prior Art by using a SELECT statement in order to distinguish a SQL query and SQLJ query.

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Regarding to claims 4, 15 and 26, Applicant Admitted Prior Art and Elmasri teaches all the claimed subject matters as discussed in claims 1, 12 and 23, Elmasri further discloses *the selected clauses comprises WHERE clauses* (Elmasri, pages 192-193).

Regarding to claims 5, 16 and 27, Applicant Admitted Prior Art and Elmasri teaches all the claimed subject matters as discussed in claims 1, 12 and 23, but does not explicitly teach *the selected clauses comprise GROUP BY clauses*. However, a SQL query is either in the form SELECT, FROM, WHERE or SELECT, FROM, GROUP BY. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Applicant Admitted Prior Art and Elmasri by using GROUP BY clause as selected clause to be replaced by false clause in order to return no data.

Regarding to claims 8, 19 and 30, Applicant Admitted Prior Art and Elmasri teaches all the claimed subject matters as discussed in claims 1, 12 and 23, Applicant Admitted Prior Art further discloses *the metadata comprises column type data for the result set* (Description of Related Art, pages 1-2).

Regarding to claims 9, 20 and 31, Applicant Admitted Prior Art and Elmasri teaches all the claimed subject matters as discussed in claims 8, 19 and 30, and further discloses the step of *converting the column type data to JAVA types* (Description of Related Art, pages 1-2).

Regarding to claims 10, 21 and 32, Applicant Admitted Prior Art and Elmasri teaches all the claimed subject matters as discussed in claims 9, 20 and 31, and further discloses the step of *generating a SQLJ iterator with parameters having the JAVA types* (Description of Related Art, pages 1-2).

Regarding to claims 11, 22 and 33, Applicant Admitted Prior Art and Elmasri teaches all the claimed subject matters as discussed in claims 1, 12 and 23, but fails to disclose the step of *determining the query requires a SQLJ iterator*. However, if the system does not have the DESCRIBE command, a developer can alter the DML statement to return no data but allow full access to the metadata to obtain the type of a result set SQLJ enables developers to user Java data types as data types in SQL, and SQLJ iterator describes columns for a result set using Java types (Description of Related Art, pages 1-2). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Applicant Admitted Prior Art by including the step of determining the requirement of SQLJ iterator in order to use the method in different platforms.

Allowable Subject Matter

8. Claims 6-7, 17-18, 28-29, 35, 37 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

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independent form including all of the limitations of the base claim and any intervening claims.

Regarding to claims 6-7, 17-18, 28-29, 35, 37 and 39, Applicant Admitted Prior Art and Elmasri does not suggest or teach the steps of *generating a list of modified queries, wherein each modified query has one or more selected clauses replaced with one or more false clauses; and executing each modified query until one executes successfully.*


Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q PHAM whose telephone number is 703-605-4242. As of October 21, 2004, new number should be (571) 272-4040. The examiner can normally be reached on Monday-Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 703-305-9790. As of October 21, 2004, new number should be (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Hung Pham
September 30, 2004


SHAHID ALAM
PRIMARY EXAMINER